Huge overspend puts weather satellites in jeopardy

Reuters

By Kelly Young

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The mismanagement of a planned weather satellite programme - it is up to \$7 billion over budget and three years behind schedule - was sharply criticised by US lawmakers on Thursday.

The National Polar-orbiting Operational Environmental Satellite System (NPOESS) is being developed jointly by the National Oceanic and Atmospheric Administration (NOAA), the Department of Defense, and NASA.

The main task of the six satellites is to provide the accurate data needed to produce five- to seven-day weather forecasts, replacing ageing civilian and military weather satellites.

Work on the programme began in 1994 and the first satellite was supposed to launch in March 2008. The entire programme was initially estimated at \$6.5 billion, but huge cost overruns now mean the satellites may never launch.

The US Department of Commerce Inspector General released a report on the troubled system on Thursday. The document does not cite any criminal wrong-doing, but it does find a long history of programme mismanagement.

"This is a catastrophe," says Congressman Dana Rohrabacher, a member of the House Science Committee, which also held a hearing on the issue on Thursday.

One of the problems highlighted in the report was that the contractors building the satellites and the instruments were given \$123 million in incentive payments, which are supposed to be awarded when contractors are doing their jobs on time and within the budget.

But the programme is grossly over budget. The inspector general estimates it is more than \$3 billion over budget, while the Department of Defense puts the figure at just under \$7 billion - roughly double NOAA's entire annual budget of.

"How do you get a reward for being behind schedule and above costs?" committee chairman Sherwood Boehlert asked.

NOAA Administrator, Vice Admiral Conrad Lautenbacher, said that in November 2005, the responsibility of awarding payments was taken away from the NPOESS project manager by the programme's executive committee.

But the report also finds fault with the lack of oversight by the executive committee, which is made up of the top leadership of NOAA, NASA and the Defense Department.

The report says the committee did not challenge early favourable assessments of a satellite instrument called Visible/Infrared Imager Radiometer Suite, even though it was known to be a challenging instrument to build. VIIRS is an infrared camera that will take pictures of clouds and measure sea surface temperatures - important for hurricane prediction.

Then, after monthly reports by NPOESS managers showing VIIRS was indeed the mission's "problem child", the executive committee failed to take action, meeting formally only six times between May 2003 and December 2005.

The House Science Committee fell short of calling for the NOAA chief's resignation. But they did have harsh words for him, criticising him for refusing to meet with the inspector general during the investigation, despite several requests.

"If you wouldn't even meet with these people, it gives me a great bit of concern," Congressman Bart Gordon told Lautenbacher. "You're an admiral. This is just embarrassing. I just simply can't understand it. I would be embarrassed to be in your situation and not try to do more."

Now, the future of the entire NPOESS programme will rest on the results of a review required by a law called Nunn-McCurdy. The review was triggered because the Department of Defense is involved and because the project is more than 25% over budget.

The results of that review should be available in June. To continue with the programme, the Defense Department must certify that the satellites are vital to national security, the cost and schedules are highly reliable and there are no cheaper alternatives.

To save on costs, the review may force the programme to reduce the capabilities of the satellites, which were each designed to carry seven instruments.

But Gordon worries that the Defense Department may withdraw its participation if it interprets "national security" narrowly - and such a withdrawal would likely mean the end for NPOESS.

He has written a letter to President George W Bush asking him to save the programme. "The costs in business losses and property damage of a severe degradation in our five- to seven-day weather forecasts could easily run into tens of billions of dollars," Gordon wrote in his letter.

NPOESS was originally intended to save money by merging future military and civilian polar orbiting weather satellite systems.